Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

a1

Claim 1 (currently amended): A method for supplying an inspired gas to a person and sampling expired gases from the person, the method comprising: ~~comprising the steps of: a)~~

positioning an oral-nasal cannula on the person in an area between a nose and a mouth of the person, said cannula having lumens for collecting expired gases individually from the nose and the mouth, lumens for detecting at the nose and mouth when said person is inhaling and exhaling, a lumen for providing a supplied gas for inspiration by the person, and a diffuser grid for diffusing said supplied gas in an open atmosphere proximate to the nose or mouth;

determining whether the person is in the exhalation or inhalation phase of a respiratory cycle using a detector connected to at least one of said detecting lumens; ~~cycle; and b)~~

delivering an increased flow of inspired gas to the person during the inhalation phase of the respiratory ~~cycle.~~ cycle;

collecting expired gases using at least one of said collecting lumens; and

analyzing said expired gases using an analyzer connected to at least one of said collecting lumens.

Claim 2 (currently amended): The method of claim 1, wherein the supplied ~~inspired~~ gas includes pure gas.

Claim 3 (original): The method of claim 2, wherein the pure gas includes oxygen.

Claim 4 (original): The method of claim 1, wherein the inspired gas includes a gas mixture.

Claim 5 (original): The method of claim 4, wherein the gas mixture includes a mixture of oxygen and air.

A1 cont'd

Claim 6 (original): The method of claim 4, wherein the gas mixture includes a mixture of oxygen and nitrogen.

Claim 7 (original): The method of claim 4, wherein the gas mixture includes a mixture of oxygen and water vapor.

Claim 8 (original): The method of claim 4, wherein the gas mixture includes a mixture of oxygen and bronchodilators.

Claim 9 (original): The method of claim 4, wherein the gas mixture includes a mixture of oxygen and helium.

Claim 10 (currently amended) The method of claim 1, ~~wherein the inspired gas may be released to the ambient environment.~~ further comprising using said detector connected to at least one of said detecting lumens to determine a primary respiratory site, and wherein said analyzer is adapted to analyze expired gases collected from said primary respiratory site.

Claim 11 (currently amended): The method of claim [[1]] 10, wherein said cannula comprises at least three collecting lumens with one collecting lumen for each of two nares of the nose and one collecting lumen for the mouth, and wherein said determination of said primary respiratory site includes identifying a less obstructed one of said nares such that said analyzer is adapted to analyze expired gases collected from said less obstructed nare. ~~also comprising the step of determining the primary respiratory site; and sampling the person's breath gas stream at least in accordance with the determination of the primary respiratory site.~~

Claim 12 (original): The method of claim 11 whereby the gas stream at the mouth is continuously sampled, in addition to sampling at said less obstructed one of said nares. ~~the~~

~~determined primary respiratory site.~~

A' cont'd

Claim 13 (currently amended): The method of claim 11, wherein ~~the step of sampling the breath gas stream includes the step of~~ said analyzing of said expired gases comprises monitoring the ventilation of the person at least in accordance with the determination of the person's primary respiratory site.

Claim 14 (currently amended): The method of claim 13 whereby ~~the~~ an expired gas stream at the mouth is continuously ~~sampled, in addition to sampling at the determined primary ventilatory site.~~ collected and analyzed.

Claim 15 (currently amended): The method of claim 1 wherein ~~the inspired gas is delivered to the person in the area of the person's nose and mouth.~~ said collecting lumens extend laterally from said nasal cannula into breath airstreams of the nose and mouth and away from said diffuser grid so as to limit interference of said supplied gas.

Claim 16 (currently amended): The method of claim 1, wherein ~~the inspired gas is delivered to the person in the area in front of the person's mouth.~~ said determining of whether the person in the exhalation or inhalation phase comprises analyzing pressure in the person's breath gas streams with said detecting lumens and said detector.

Claim 17 (currently amended): The method of claim **[[**1**]]** 16, wherein ~~the determining of whether the person is in the exhalation or inhalation phase is accomplished by analyzing the pressure in the person's breath gas stream.~~ said detector is a pressure transducer.

Claim 18 (currently amended): The method of claim ~~17 also~~ 16, further comprising ~~the step of~~ monitoring the respiratory rate in accord with the pressure analysis.

Claim 19 (currently amended): The method of claim ~~17 also~~ 16, further comprising ~~the step of~~ monitoring the inspiratory/expiratory time ratio in accord with the pressure analysis.

Claim 20 (currently amended): The method of claim [[17,]] 16, wherein the pressure in the person's breath gas stream is determined by sampling pressure at at least one respiratory site.

Claim 21 (currently amended): The method of claim [[17,]] 1, wherein the determining of whether the person is in the exhalation or inhalation phase ~~is accomplished by~~ comprises analyzing the humidity in the person's breath gas ~~stream.~~ stream with said detecting lumens and said detector.

Claim 22 (currently amended): The method of claim ~~21 also~~ 21, further comprising ~~the step of~~ monitoring ~~the~~ a respiratory rate in accord with the humidity analysis.

Claim 23 (currently amended): The method of claim ~~21 also~~ 21, further comprising ~~the step of~~ monitoring ~~the~~ an inspiratory/expiratory time ratio in accord with the humidity analysis.

Claim 24 (currently amended): The method of claim [[17,]] 1, wherein the determining of whether the person is in the exhalation or inhalation phase ~~is accomplished by~~ comprises analyzing the temperature in the person's breath gas ~~stream.~~ stream with said detecting lumens and said detector.

Claim 25 (currently amended): The method of claim ~~24 also~~ 24, further comprising ~~the step of~~ monitoring ~~the~~ a respiratory rate in accord with the temperature analysis.

Claim 26 (currently amended): The method of claim ~~24 also~~ 24, further comprising ~~the step of~~ monitoring ~~the~~ an inspiratory/expiratory time ratio in accord with the temperature analysis.

Claim 27 (currently amended): The method of claim [[11,]] 10, wherein ~~the~~

determining ~~of the~~ said primary respiratory site is accomplished by sampling pressure at the respiratory sites and comparing said ~~pressures.~~ pressures with said analyzer to identify a respiratory site demonstrating a larger pressure swing.

Claim 28 (currently amended): The method of claim [[11,]] 1, wherein ~~the step of sampling the exhaled gas stream~~ analyzing said expired gases includes sampling the level of CO_2 in the person's expired breath gas stream.

Claim 29 (currently amended): The method of claim 13, wherein the monitoring of the ventilation is accomplished by measuring the CO_2 levels in the person's expired breath gas stream.

Claim 30 (original): The method of claim 29, wherein the monitoring of the ventilation is accomplished by measuring the end-tidal CO_2 value.

Claim 31 (original): The method of claim 29, wherein the monitoring of the ventilation is accomplished by determining the area under the expired CO_2 time pilot.

Claim 32 (original): The method of claim 1 also comprising the step of delivering a decreased flow of inspired gas to the patient during exhalation.

Claim 33 (currently amended): The method of claim 11, wherein analyzing said expired gases comprises ~~the step of sampling the breath gas stream includes~~ monitoring the level of a drug in the person's expired breath gas stream.

Claim 34 (original): The method of claim 33, wherein the drug is an intravenous anesthetic.

Claim 35 (original): The method of claim 33 wherein the drug is propofol.

Claim 36 (currently amended): The method of claim [[11,]] 1, wherein ~~the sampled gas~~

~~is xenon.~~ analyzing said expired gases comprises detecting xenon in the person's expired breath gas stream.

Claim 37 (currently amended): An apparatus that delivers inspired gas to a person and samples expired gases from the person, said apparatus comprising: [[a)]]

an oral-nasal cannula having an elongated body adapted to be situated on the person in an area between a nose and a mouth of the person, said cannula comprising samplers extending into expired breath gas streams of the nose and the mouth and a diffuser grid for releasing a supplied gas in an open atmosphere proximate to the nose or mouth;

an inspired gas delivery device, said gas delivery device comprising a mechanism for delivering variable flow of said supplied gas and a controller for managing said mechanism in response to a determined phase of the person's respiration cycle;

an analyzer adapted to detect characteristics of said expired breath gas streams, said analyzer being connected to said controller; and

a set of lumens connecting said cannula to said delivery device and said analyzer; ~~device; b) at least one respiratory site sampling device which samples the pressure at at least one respiratory site; c) and~~ wherein ~~the respiratory site sampling device is connected to a pressure~~ said analyzer ~~which determines~~ detects said characteristics and communicates with said controller to determine the present phase of the person's respiration cycle, ~~cycle; d)~~ and wherein the inspired gas delivery device ~~is connected to a~~ controller ~~that~~ modulates ~~the flow~~ delivery of inspired gas to said cannula in accordance with the determined phase of the person's respiratory cycle so as to provide a higher flow of supplied gas to the person during an inhalation phase. ~~cycle.~~

Claim 38 (currently amended): The apparatus of claim 37, wherein ~~the respiratory site sampling device comprises~~ said samplers comprise at least one nasal sampling device for each nasal passage ~~which samples the pressure in the person's nasal airway~~ and an oral sampling device for the mouth. ~~device which samples the pressure in the person's oral airway.~~

Claim 39 (currently amended): The apparatus of claim 37, wherein the controller directs said mechanism to deliver ~~delivers~~ a higher flow of supplied ~~inspired~~ gas during a portion of the inhalation phase of the person's respiratory cycle.

Claim 40 (currently amended): The apparatus of claim 38, wherein said analyzer comprises a pressure comparator and wherein at least one ~~two~~ of the nasal samplers and the oral sampler ~~sampling devices~~ are connected to said ~~a~~ pressure comparator such that said analyzer can determine a ~~which determines the person's~~ primary respiratory ~~site.~~ site of the person.

Claim 41 (currently amended): The apparatus of claim 40, wherein said analyzer further comprises ~~37 also comprising~~ a gas detecting ~~sampling~~ device.

Claim 42 (currently amended): The apparatus of claim 41, wherein the gas detecting ~~sampling~~ device is a capnometer.

Claim 43 (currently amended): The apparatus of claim 41, wherein the gas detecting ~~sampling~~ device comprises a nasal gas sampling device and an oral gas sampling device and wherein the controller selects at least the gas stream from the primary respiratory site for monitoring.

Claim 44 (original): The apparatus of claim 43, wherein the oral and nasal gas sampling devices are capnometers.

Claim 45 (currently amended): The apparatus of claim ~~37 also comprising~~ 37, wherein said inspired gas delivery device comprises a flow control valve and wherein the controller runs software that indicates an error to a user if while the flow control valve is open, the controller detects pressure at a ~~the~~ source of said supplied ~~inspired~~ gas but fails to detect pressure downstream of the flow control valve.

Claim 46 (original): The apparatus of claim 37 also comprising an auditory breath sonification device that amplifies breath sounds.

Claim 47 (original): The apparatus of claim 46, wherein the auditory breath sonification device is a microphone that amplifies actual breath sounds.

Claim 48 (original): The apparatus of claim 46, wherein the auditory breath sonification device comprises a white noise generator that provides simulated breath sounds.

Claim 49 (currently amended): The apparatus of claim 48, wherein said simulated breath sounds distinguish between inhalation and exhalation breath sounds according to said determined present phase of the person's respiration cycle. ~~sounds.~~

Claim 50 (currently amended): The apparatus of claim 37, [[41,]] wherein the gas detecting ~~sampling~~ device measures ~~samples~~ CO_2 presence. ~~gas.~~

Claim 51 (currently amended): The apparatus of claim 37, [[41,]] wherein the gas detecting ~~sampling~~ device measures ~~samples~~ xenon presence. ~~gas.~~

Claim 52 (currently amended): The apparatus of claim 37, [[41,]] wherein the detector is adapted to identify traces of a drug in expired breath gas of the person. ~~sampled is a drug.~~

Claim 53 (original): The apparatus of claim 52, wherein the drug is an intravenous anesthetic.

Claim 54 (original): The apparatus of claim 52, wherein the drug is propofol.

Claim 55 (currently amended): The apparatus of claim ~~37, wherein the inspired gas delivery device comprises a diffuser.~~ 38, wherein said samplers have distal ends with gas inlets at said distal ends, and wherein said gas inlets extend into expired breath airstreams of

the nose and mouth and away from said diffuser grid so as to limit interference by said supplied gas upon said analyzer.

Claim 56 (currently amended): The apparatus of claim 37, wherein the controller reduces the flow of inspired gas during an ~~the~~ exhalation phase.

Claim 57 (currently amended): A method for delivering an inspired gas to a person and monitoring gases expired by the person, said method comprising: ~~gas, the method comprising the steps of: a)~~

determining the breath phase of the person with a detector, said detector having lumens interfacing with the person via one or more lumens inserted in one or more paths of one or more expired breath gas streams of the person, said determined breath phase including an inhalation phase and an exhalation phase; [[b)]]

delivering a relatively higher flow of an inspired gas to the person during the inhalation phase, said inspired gas being introduced to an open atmosphere proximate to the nose or mouth of the person using a inspired gas supply lumen and a diffuser grid; and ~~phase; and c)~~

monitoring gases in the one or more expired breath gas streams with an analyzer to assess the health of the person, said analyzer having lumens interfacing with the person via said one or more paths; ~~stream.~~

wherein said monitoring provides feedback for controlling flow of said inspired gas.

Claim 58 (currently amended): The method of claim 57 ~~also~~ further comprising ~~the step of~~ determining at least one of the breath rate and inspiratory/expiratory time ratio.

Claim 59 (currently amended): The method of claim [[57,]] 58, wherein ~~the step of~~ determining at least one of the breath phase, breath rate and inspiratory/expiratory time ratio is accomplished by analyzing the pressure waveform [[at]] produced within at least one ~~respiratory site.~~ of said paths during said phases.

Claim 60 (currently amended): The method of claim [[57,]] 58, wherein ~~the step of~~ determining at least one of the breath phase, breath rate and inspiratory/expiratory time ratio is accomplished by monitoring the humidity at at least one respiratory site.

Claim 61 (currently amended): The method of claim [[57,]] 58, wherein ~~the step of~~ determining at least one of the breath phase, breath rate and inspiratory/expiratory time ratio is accomplished by monitoring the temperature at at least one respiratory site.

Claim 62 (original): The method of claim 57 also comprising the step of reducing the flow of inspired gas during the exhalation phase.

Claim 63 (original): The method of claim 57, wherein the monitoring of exhaled gas is performed during a period of low gas flow in the exhalation phase.

Claim 64 (currently amended): The apparatus of claim 37 ~~also comprising a plurality of lumens which effect one or more of delivering of inspired gas, respiratory site sampling and gas sampling and~~ wherein said lumens and said cannula are disposable, and wherein said lumens are packaged affixed to one another along separable tear lines.

Claim 65 (original): The apparatus of claim 64, wherein the lumen that accommodates the flow of inspired gas is of larger circumference than the other lumens.

Claim 66 (currently amended): ~~An~~ The apparatus according to claim 64, ~~64~~ wherein one of said lumens is a stimulus channel that carries an auditory prompt to the person.

Claims 67-79 (canceled).

Claim 80 (new): The method according to claim 1, wherein said lumens and said cannula comprise a pneumatic harness, and wherein said lumens are pre-packaged in one or more clusters, said clusters being manually separable from one another and attachable to said

cannula prior to positioning on the person.

Claim 81 (new): The method according to claim 80, wherein said clusters have tear lines to permit separation of the lumens from one another.

Claim 82 (new): The method according to claim 80, wherein each cluster has a cross section defining an aerofoil shape.

Claim 83 (new): The method according to claim 80, wherein said pneumatic harness further comprises an adapter that facilitates connecting the pneumatic harness to a medical device.

Claim 84 (new): The method according to claim 1, further comprising determining which of two nares of the nose is less obstructed, wherein said determining of the less obstructed nare includes: sampling pressure in the gas stream of each nare; comparing the pressure variations in the gas stream within each nare; comparing the extent of variation of said pressures as between each nare; and selecting the nare with the larger pressure variation as the nare that is less obstructed.

Claim 85 (new): The method of claim 84, wherein the nare that is less obstructed is selected to receive inspired gas.

Claim 86 (new): The method of claim 84, wherein the nare that is less obstructed is selected for said collecting of said expired gases.

Claim 87 (new): The method according to claim 39, wherein said increased flow of supplied gas is delivered during a portion of the inhalation phase of the person's respiratory cycle, wherein said portion of the inhalation phase ends in advance of the inhalation phase.

Claim 88 (new): The apparatus according to claim 37, wherein said lumens and said

cannula comprise a pneumatic harness, and wherein said lumens are pre-packaged in one or more clusters, said clusters being manually separable from one another and attachable to said cannula prior to positioning on the person.

Claim 89 (new): The apparatus according to claim 88, wherein at least one of the lumens is larger than the other lumens.

Claim 90 (new): The apparatus according to claim 88, wherein said clusters have tear lines to permit separation of the lumens from one another.

Claim 91 (new): The apparatus according to claim 88, wherein each cluster has a cross section defining an aerofoil shape.

Claim 92 (new): The apparatus according to claim 39, wherein said portion of the inhalation phase ends in advance of the inhalation phase.